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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,283	09/25/2001	Randy P. Stanley	42390P12376	3844

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EXAMINER	
HOFFMAN, BRANDON S	

ART UNIT	PAPER NUMBER
2136	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/965,283	STANLEY, RANDY P.	
	Examin r	Art Unit	
	Brandon Hoffman	2136	

-- The MAILING DATE of this communication appears on th cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 22 November 2004.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-33 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-33 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-33 are pending in this office action.

2. Applicant's arguments filed November 22, 2004, have been fully considered, but they are not persuasive.

Rejections

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

4. Claims 1-8, 10-27, 29-31, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Fung (U.S. Patent No. 5,396,635).

Regarding claims 1, 7, 20, 24, 27, and 30, Fung teaches an method/apparatus/ machine-readable medium, comprising:

- A computer readable medium (fig. 1, ref. num 15 and fig. 2);
- Detecting a user **initiated** event in a computing system (column 3, lines 12-21);
- A first integrated circuit having multiple states of performance including a first state of performance, a second state of performance higher than the first state of performance, and a third state of performance higher than the second state of performance, the first integrated circuit coupled to the computer readable medium (col. 2, lines 1-6 and fig. 8, 'sleep', 'doze', and 'on'); and

- A program stored in the computer readable medium to manage power consumption within the first integrated circuit, instructions associated with the program to directly transition the first integrated circuit from the first state of performance to the third state of performance based upon detecting a user **initiated** event (col. 3, lines 32-38).

Regarding claim 2, Fung teaches wherein the user event is defined by a programming environment within which the computing system is operating (col. 3, lines 12-21).

Regarding claim 3, Fung teaches wherein directly transitioning comprises transitioning without delay (col. 3, lines 39-48).

Regarding claim 4, Fung teaches further comprising operating the integrated circuit at the third state of performance for a predefined period of time based upon thermal considerations to operate at the third state of performance without failure (fig. 8, the 'on' state only lasts for brief periods of time, and col. 3, lines 27-31).

Regarding claim 5, Fung teaches wherein the computing system comprises a laptop computer (col. 2,lines 19-29).

Regarding claim 6, Fung teaches wherein the computing system comprises a personal digital assistant (col. 1, lines 22-23).

Regarding claims 8 and 31, Fung teaches wherein the first state of performance comprises a first voltage level and a first operating frequency (col. 6, lines 16-19).

Regarding claims 10, 21, 25, 29, and 33, Fung teaches further comprising frequency regulation logic to change an operating frequency of the first integrated circuit, the frequency regulation logic to receive a signal from the program (col. 6, lines 45-48).

Regarding claims 11, 22, and 26, Fung teaches further comprising voltage regulation logic to change an operating voltage of the first integrated circuit, the voltage regulation logic to receive a signal from the program (col. 6, lines 53-62).

Regarding claims 12-14, Fung teaches wherein the instructions reside in a Basic Input Output System, an operating system, or an application software (col. 5, lines 64-68).

Regarding claim 15, Fung teaches wherein the first integrated circuit comprises a chip set (col. 4, lines 40-50).

Regarding claim 16, Fung teaches wherein the first integrated circuit comprises a processing unit (fig. 1, ref. num 4).

Regarding claim 17, Fung teaches wherein the Basic Input Output System is to

receive a notification signal from an operating system that the user event has occurred (col. 5, lines 64-68).

Regarding claim 18, Fung teaches wherein the program comprises an increasing state transition algorithm discrete from a decreasing state transition algorithm (col. 3, lines 1-11).

Regarding claim 19, Fung teaches wherein the program to transition the first integrated circuit to a next higher state of performance based upon an occurrence of a non-user event increasing utilization of the first integrated circuit over a preset threshold (col. 3, lines 22-31).

Regarding claim 23, Fung teaches operating the integrated circuit at the third state of performance for a transient period of time (fig. 8, the 'on' state only lasts for brief periods of time).

Claim Rejections - 35 USC § 103

5. Claims 9, 28, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fung (U.S. Patent No. 5,396,635) in view of Hawkins et al. (EP 0,708,398).

Regarding claims 9, 28, and 32, Fung teaches all the limitations of claims 7, 27, and 30, respectively, above. However, Fung does not disclose wherein the third state of performance comprises a second integrated circuit co-processing instructions with

the first integrated circuit.

Hawkins et al. teaches wherein the third state of performance comprises a second integrated circuit co-processing instructions with the first integrated circuit (page 7, table I).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine a second IC co-processing instructions for a third state, as taught by Hawkins et al., with the apparatus/readable medium of Fung. It would have been obvious for such modifications because a second processor processing during a third state of performance provides full speed processing power (see page 7, lines 29-33 of Hawkins et al.). These arts are analogous because they are both limiting power based on certain events.

Response to Arguments

6. Applicant amends claims 1, 7, 20, 23, 24, 27, and 30.

7. Applicant argues:

   a. Fung does not teach the transitioning is based on a user-initiated event (page 10, last paragraph).

   b. Fung does not teach transitioning from a low power state to a higher power state—Fung only discloses transitioning from a high power state to a lower power state (page 11, second paragraph).

c. The dependent claims are allowable based on their dependency on the independent claims (page 13).

Regarding argument (a), examiner disagrees with applicant. Figure 8 of Fung shows the computer transitioning from a high power level (ON), to a lower level (DOZE), and to an even lower level (SLEEP) based on idle conditions of the system. Figure 8 also shows the transition from the lowest power level (SLEEP) to the highest power level (ON) based on a **user-initiated event**. The user-initiated event is the user typing data into the Lotus 1-2-3 application. This clearly shows the transitioning being based on user-initiated events.

Regarding argument (b), examiner disagrees with applicant. It would stand to reason that Fung would **have to** incorporate transitioning from a low power state to a higher power state. This reasoning is supported by the fact that if Fung only disclosed a transition from a high power state to a lower power state, the power state of the computer would NEVER return to a higher state. For example, the high power state of the computer transitions from a power level of 3 (highest) to a power level of 2 (middle power) because of battery use. The computer then transitions from power level 2 to a power level of 1 (lowest power) because of some other restraints. If Fung were to not be able to transition from a low power state (level 1) to a higher power state (level 2 or level 3), the computer would be useless and should be discarded because a low power level is not appropriate for most users.

Regarding argument (c), examiner disagrees with applicant. Based on the examiners arguments set forth for arguments (a) and (b), the dependent claims stand as rejected.

Conclusion

8. **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian Hoff

BH

EMMANUEL L. MOISE
PRIMARY EXAMINER